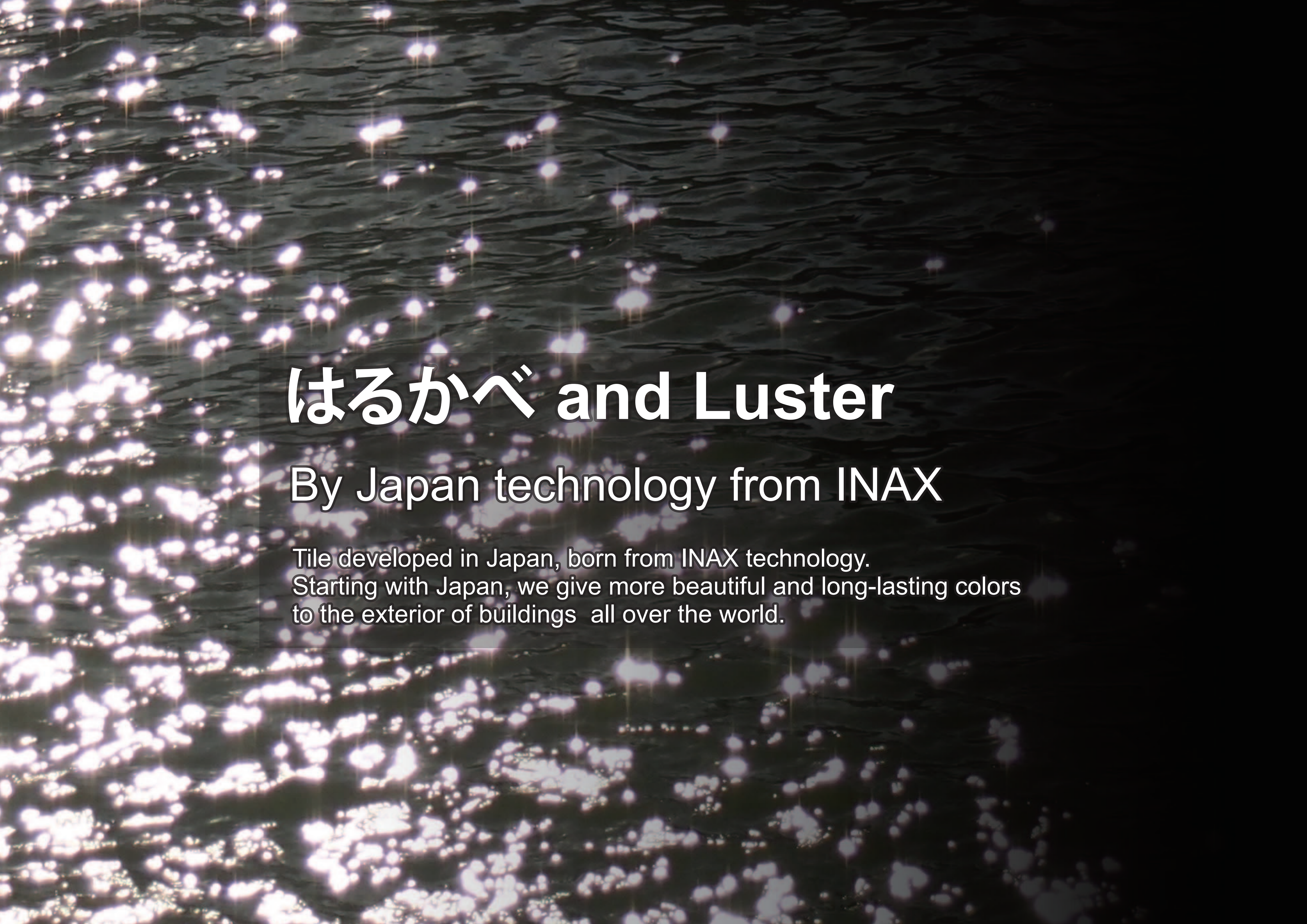
INAX

# はるかべ and Luster

By Japan technology from INAX



# はるかべ and Luster

## By Japan technology from INAX

Tile developed in Japan, born from INAX technology. Starting with Japan, we give more beautiful and long-lasting colors to the exterior of buildings all over the world.

Classification

## 1. はるかべ Harukabe

Tile characterized by unevenness and irregularities, giving a sense of shadow and depth.
Constructed using specialized adhesive, removing the need for filling joints.

## 2. Luster

Characterized by a metallic luster, buildings are given a sense of magnificence. This thin metallic film was manufactured (using an evaporation method) to ensure certain characteristics, such as stable metallic luster and long term durability.

## 3. Mosaic & MICRO GUARD

Exterior tile which easily matches with various materials.
We can add a Microguard which has been shown to have an effect on dirt from urban environments.

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# 1. はるかべ Harukabe

**With the " はるかべ " Series, we make a clear distinction from conventional tile and have realized a new kind of exterior.**

## 〈Design〉

With this tile which has a varied, uneven texture, we have realized a sense of deep shadow while also removing the need for filling joints.

We offer an until now nonexistent unique tiled exterior.

## 〈Quality & Durability〉

" はるかべ " tile is able to be applied to wall surfaces with its specialized, high elasticity adhesive.

The elasticity of our adhesive layer absorbs not only the movement of the building over a long period of time but also cracks in the structure and other causes of defects before damage to the tile can occur.

Construction methods using elastic adhesive are widely used across Japan and their reliability is recognized by a large number of architects.

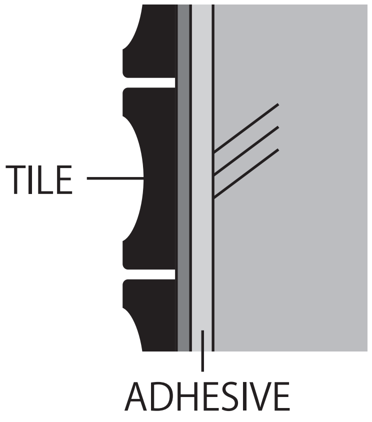
## 〈Construction methods using elastic adhesive〉

The detachment of tiles can diminish a building's safety and value.
As for the cause of tile detachment, stress occurs when there are changes in the temperature of the surface of the wall as well as changes between dry and humid climates.

Detachment occurs when this stress surpasses the strength of the adhesion between the materials that make up the surface of the wall.

Furthermore, due to the effects of earthquakes in Japan, various countermeasures are being developed to solve the problem of tile detachment.

Construction methods using elastic adhesive is a revolutionary detachment prevention method which is able to suppress the stress that occurs between the tile and the surface of the wall by using an adhesive which retains its elasticity even after hardening.

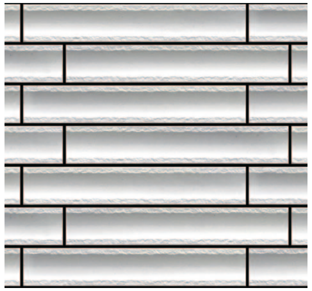


### Characteristic

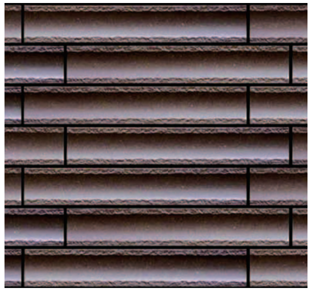
- Due to the elasticity of the adhesive, the adhesive layer can absorb transformations in the wall backing material and has high detachment resistance.
- The adhesive reduces dirt caused by efflorescence and airborne powder by inhibiting the movement of water from the ground work.
- By not having to fill the joints, the degree of freedom for an uneven design on the surface of the tiles multiplies.

# RB

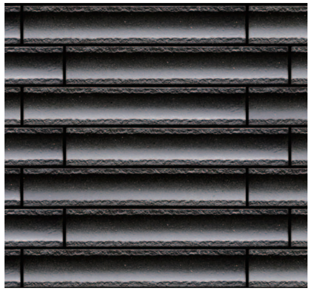
# R-BORDER



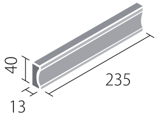
HAL-40B/RB-1



HAL-40B/RB-2



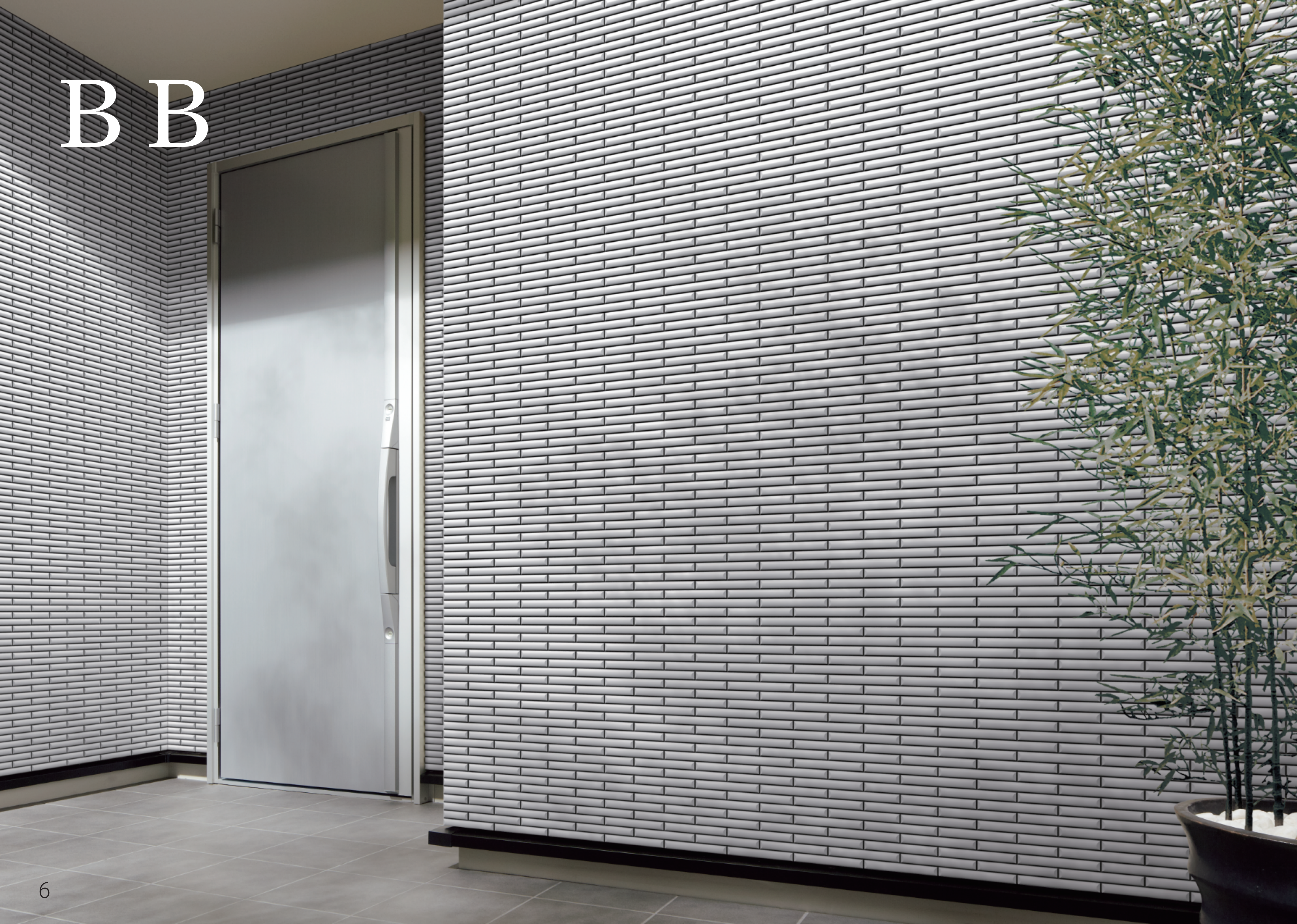
HAL-40B/RB-3

| | Exterior Tile<br>235×40 |
|---|---|
| | INAX-40B/RB<br> |
| size / sht | 238×43mm |
| size / pc | 235×40mm |
| thickness | 13.0mm |
| quantity / sqm | 98pcs |

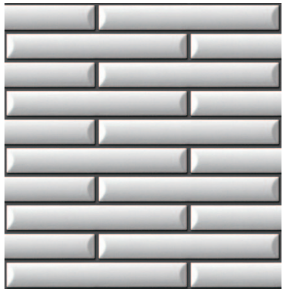
Pasting by adhesive　Interior wall　Best　Exterior wall　Best　Fence wall　Best

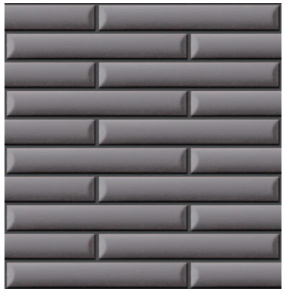
Pictures are for reference only. Please confirm the real samples.

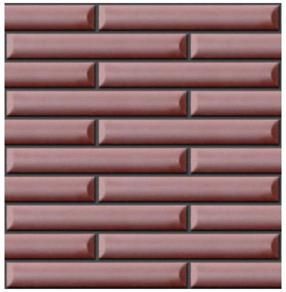
# B B



# BB BAMBOO BORDER


INAX-20B/BB-1

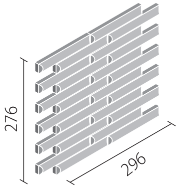

INAX-20B/BB-2


INAX-20B/BB-3

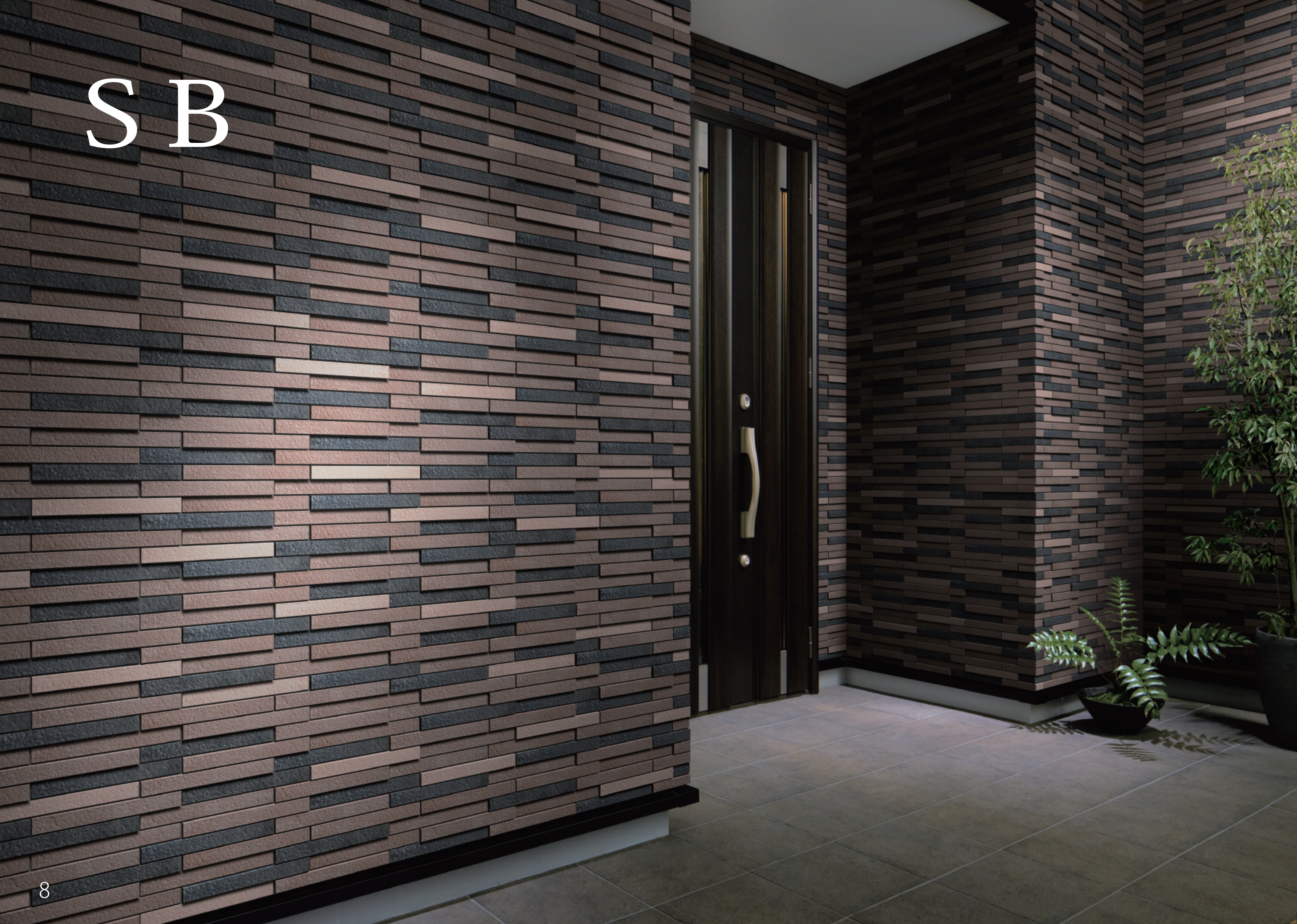
Pasting by adhesive | Interior wall | Best | Exterior wall | Best | Fence wall | Best

Pictures are for reference only. Please confirm the real samples.
Geometric stream line is suitable for private house or villa.

INAX-20B/BB

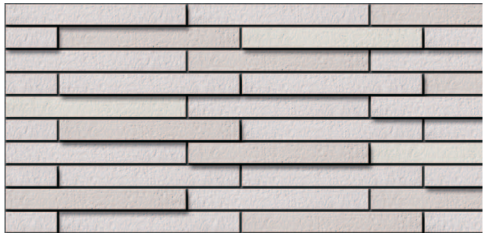


| | Exterior Tile<br>145×20 |
|---|---|
| size / sht | 296×276mm |
| size / pc | 145×20mm |
| thickness | 7.5mm |
| pieces / sheet | 24pcs |
| quantity / sqm | 12.2shts |

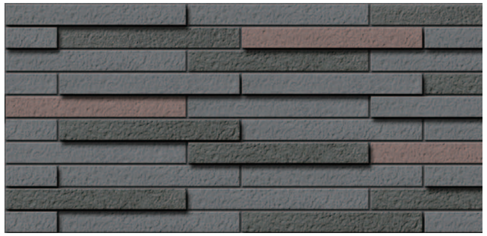


# S B

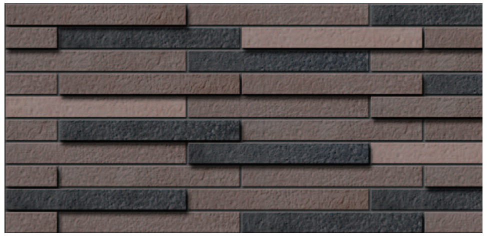
# SB STONE BORDER



INAX-30B/SB-1



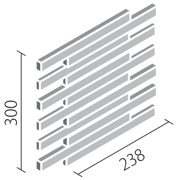
INAX-30B/SB-2



INAX-30B/SB-3

Exterior Tile
235×27

INAX-30B/SB



| | |
|---|---|
| size / sht | 238×300mm |
| size / pc | 235×27mm |
| thickness | 7.0～12.0mm |
| pieces / sheet | 10pcs |
| quantity / sqm | 14shts |

Pasting by adhesive　Interior wall　Best　Exterior wall　Best　Fence wall　Best

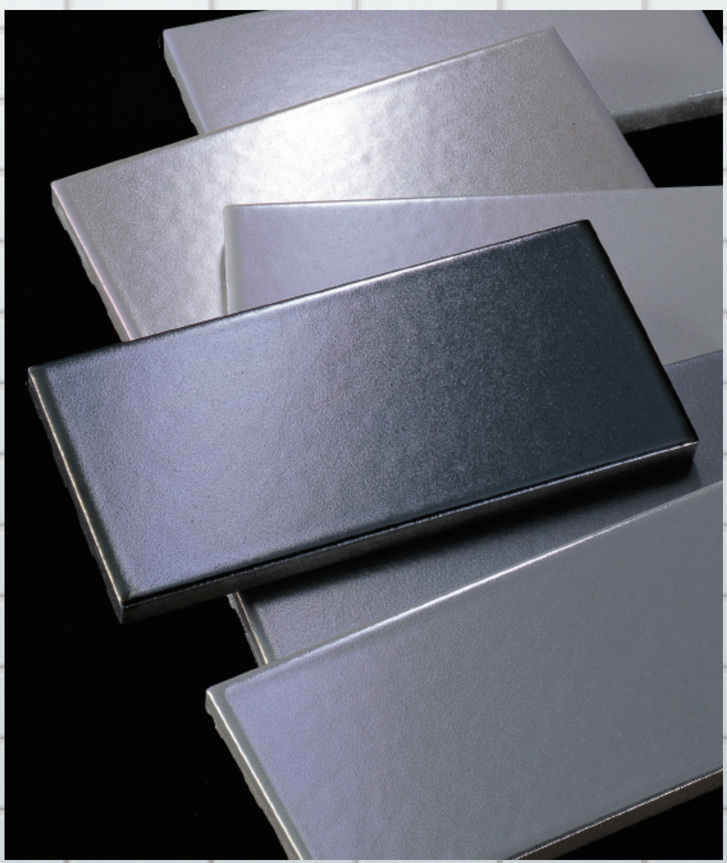
Pictures are for reference only. Please confirm the real samples.
Combination of natural 3mixed color and 2kinds of thickness is suitable for house or villa.

# 2. Luster

A metallic texture perfectly suits sharp, modern buildings. Luster is a tile that shows off metallic brilliance.

Our company is the only one around the world manufacturing Luster tile, created using an evaporation method to form a thin metallic film on the surface of the tile, which we provide to Japan and the rest of the world.

## ■ INAX Characteristic of the Luster tile

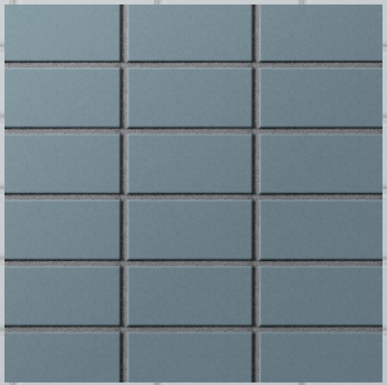


### Characteristic

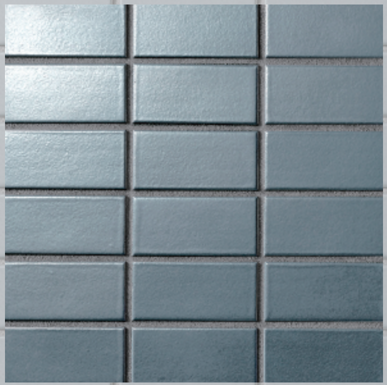
- The metallic texture gives an impression of luxury to buildings.
- Combining with glass is optimal.
- The thin metallic film contains weatherproofing and antifouling properties, so that it may be used for exteriors.

## 〈Surface〉

**General glaze tile**



**Luster tile**



### About a Luster

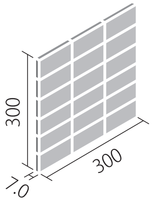
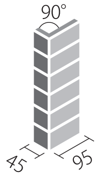
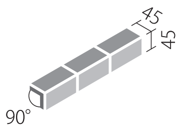
Luster ware is called so due to the shining beauty that exists within the surface of the ceramic, when compared to normal ceramics. Originating from ancient Persia, metallic oxide was mixed into the glaze. Once burning, gold and silver hues could be observed in the finished product.

Sicilian tin glaze was famous in Europe, and Chinese Yohen Tenmoku tea bowls made in Jianyao were famous from the Song Dynasty in China.

There are two methods for acquiring metallic luster.

1. The Solution Method　This is a popular method passed down since ancient times. The shine of gold, silver, and pearls can be achieved. This is an easy technique usually meant for tableware, however managing an even color on the wide surface of a tile is considerably more difficult.
2. The Evaporation Method　A metallic shine can be achieved by forcing steam made from metal salt to adhere to the surface of the tile. Evaporation is similar to the system used to manufacture IC circuits. The Evaporation Method has better color stability and durability than the Solution Method.

# SLC

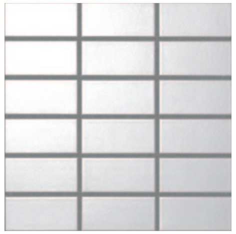
|  | Exterior Mosaic 95×45 | 90°angle (paper mounted) | 90°angle (paper mounted) |
|---|---|---|---|
|  | INAX-255/SLC | INAX-255/90-14/SLC | INAX-255/90-15/SLC |
|  |  |  |  |
| size / sht | 300×300mm | 300×100mm | 300×50mm |
| size / pc | 95×45mm | (95+45)×45mm | (45+45)×95mm |
| thickness | 7.0mm | 7.0mm | 7.0mm |
| pieces/sheet | 18pcs | 6pcs | 3pcs |
| quantity/sqm | 11.2shts | 3.4shts/m | 3.4shts/m |

Replace for aluminum material, suitable for hotels, offices, commercial centers ...

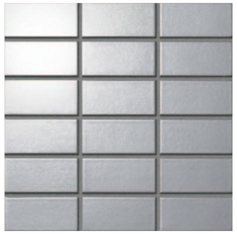
Pasting by sheet | Interior wall | Best | Exterior wall | Best | Fence wall | Best

Corner Tile: Place an order before 60 days.

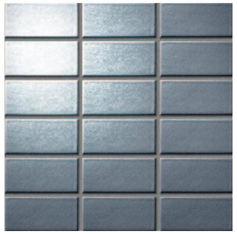
# SLC SHINJU LUSTER COLOR



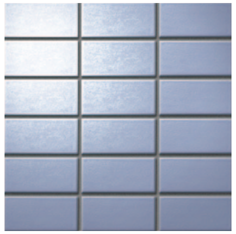
SLC-1



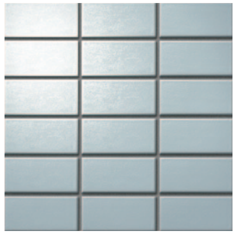
SLC-2



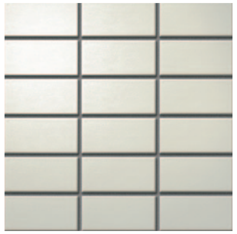
SLC-3



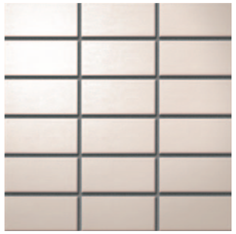
SLC-4



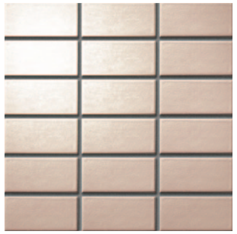
SLC-5



SLC-6

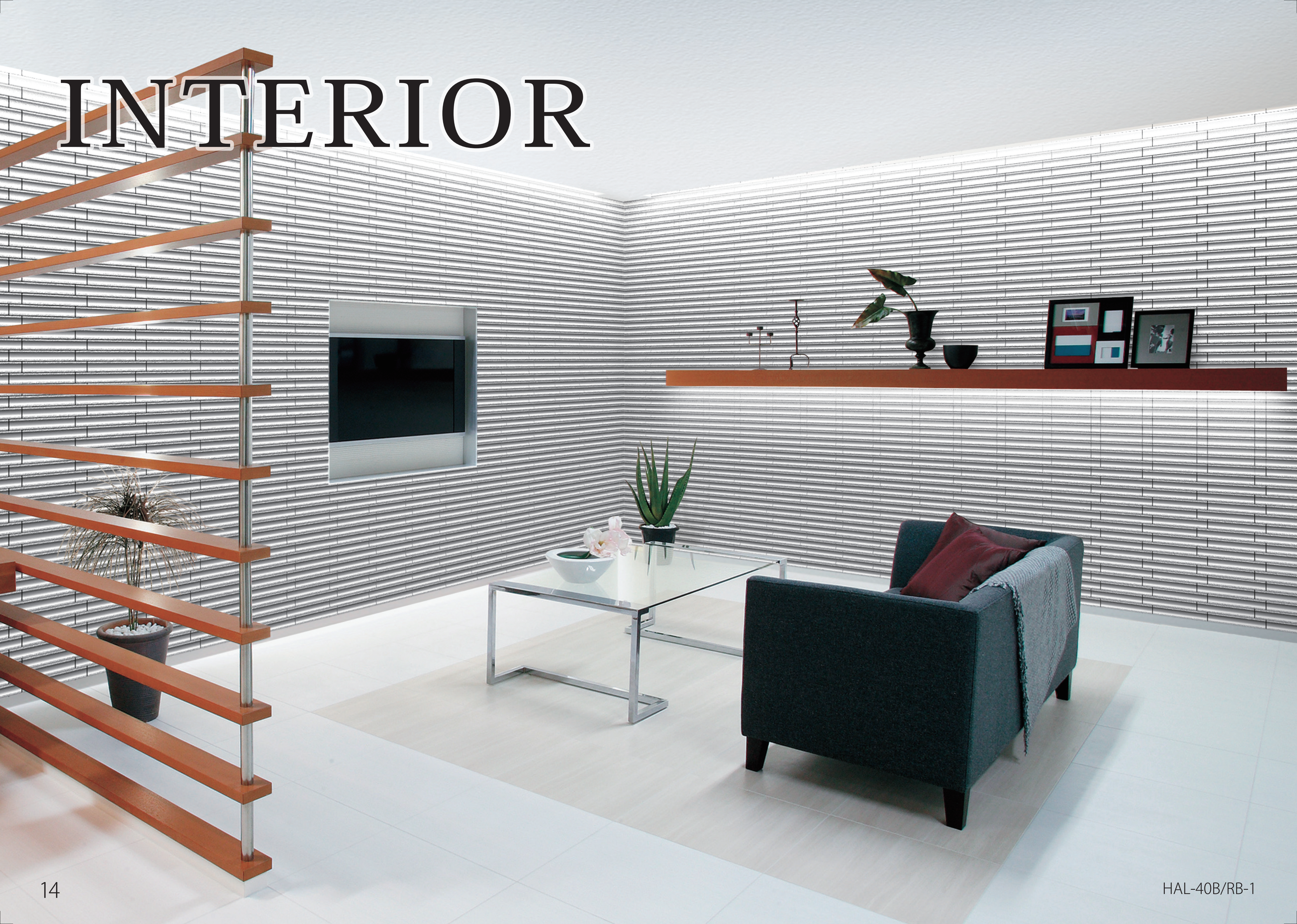


SLC-8



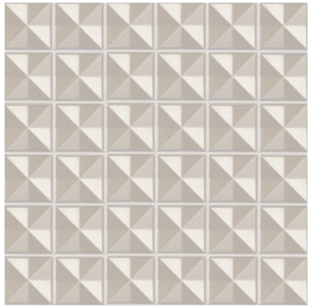
SLC-9

# INTERIOR

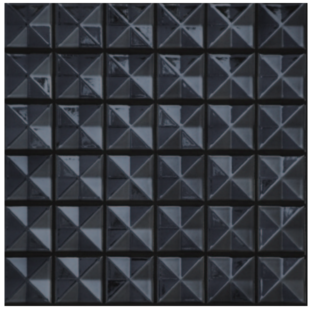


HAL-40B/RB-1

# DELTA



IM-50P1/DL1



IM-50P1/DL2

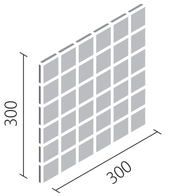
Pasting by adhesive　Interior wall　Best

Corner Tile: Place an order before 60 days.

Unique and elegant surface designed in Japan. Suitable for luxurious interior.

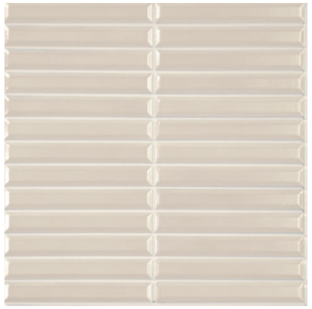
Interior Mosaic
47×47

IM-50P1/DL

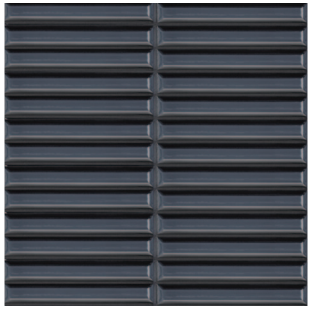


| | |
|---|---|
| size / sht | 300×300mm |
| size / pc | 47×47mm |
| thickness | 7.0mm |
| pieces / sheet | 36pcs |
| quantity / sqm | 11.2shts |

# BULLION BORDER



IM-1520P1/BL1



IM-1520P1/BL2

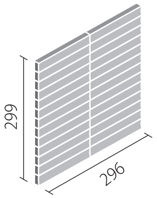
Pasting by adhesive　Interior wall　Best

Corner Tile: Place an order before 60 days.

Unique and elegant surface designed in Japan. Suitable for luxurious interior.

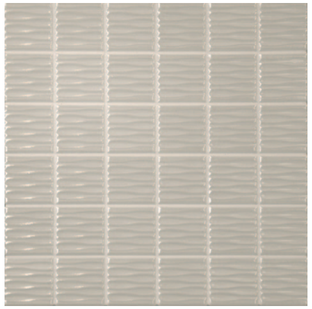
**Interior Mosaic**
**145×20**

IM-1520P1/BL

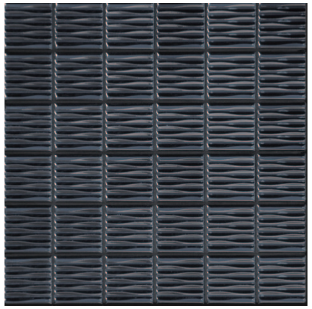


| | |
|---|---|
| size / sht | 296×299mm |
| size / pc | 145×20mm |
| thickness | 6.0+2.0mm |
| pieces / sheet | 26pcs |
| quantity / sqm | 11.3shts |

# WAVES



IM-50P1/WV1



IM-50P1/WV2

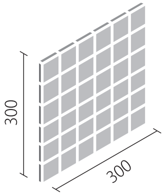
Pasting by adhesive
Interior wall
Best

Corner Tile: Place an order before 60 days.

Unique and elegant surface designed in Japan. Suitable for luxurious interior.

Interior Mosaic
47×47

IM-50P1/WV



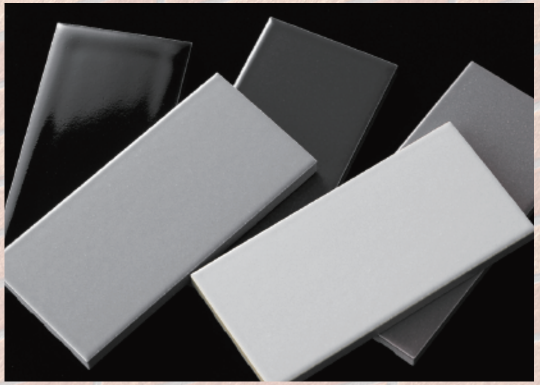
| | |
|---|---|
| size / sht | 300×300mm |
| size / pc | 47×47mm |
| thickness | 7.0mm |
| pieces / sheet | 36pcs |
| quantity / sqm | 11.2shts |

# 3. Mosaic & MICRO GUARD

The Mosaic series is prepared with a colorful design and texture, making it the perfect match for various sorts of buildings. The earth colors and plain colors create wonderful harmony with other materials.

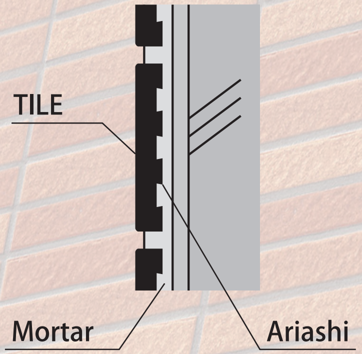
By employing a construction technique developed in Japan, the detach resistant tiles on the underside, known as "Ariashi" are a standard specification on the Mosaic tiles.

## Rich variety of color



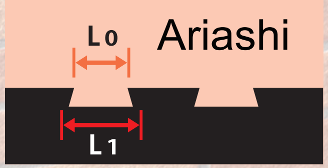
## The underside of the tile for installation method by mortar.

As for countermeasures to prevent tile detachment, by adding "Ariashi" to the underside of the tile and filling the joints the tile becomes difficult to remove.

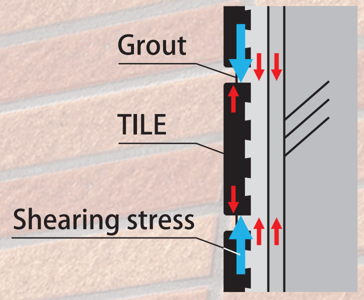


### Characteristic

- Guaranteed adhesive strength
  The underside of tiles are "Ariashi".  L1>L0



- Shearing stress resistant
  By constructing the joints of tiles, fracturing on the underside of tiles can be prevented when concentrated stress occurs.



**With the Mosaic series we are able to add a Micro guard which is effective against urban dirt.**

# MICRO GUARD

**The Micro guard, which protects important buildings from dirt,is applied to tiles making attachment of dirt in urban environments much more difficult.**

The Exterior wall of Microguard Tile.

## The nature of exterior dirt

### Urban dirt is···

A solution composition (silicone oil) from a silicone based caulking material used in the attachment of window glass is washed over the building due to rain water and adheres to the exterior. Dirt and grime appear on buildings when dust and carbon adhere to that silicone oil.

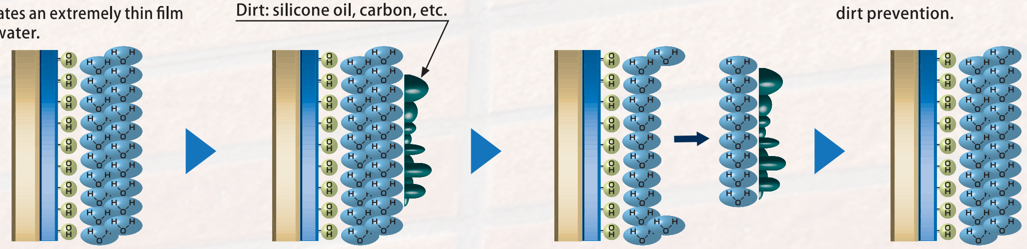
The dirt of the exterior wall of paint
The line by the dirt under window occurred.

## Dirt prevention mechanism and its effects

For tile manufactured with Micro guard,the surface of the tile is more receptive to water than dirt particles, so water can get between the surface of the tile and the dirt particles. Dirt is washed away with rain water and hydrophobic dirt, such as soot and automobile exhaust, have difficulty attaching to the surface of the tiles.

Dirt prevention mechanism and its effects

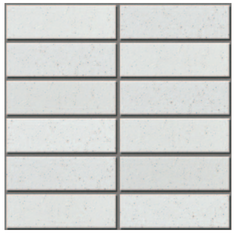
1. The Micro guard layer on the surface of the tiles attracts water molecules in the air and creates an extremely thin film of water.
2. Dirt attaches to the film of water.
3. Dirt particles are washed away with water.
4. Once again, the Micro guard layer attracts the water particles in the air and continues to maintain dirt prevention.

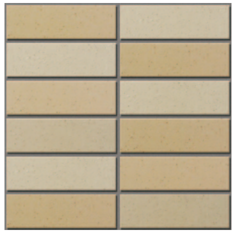


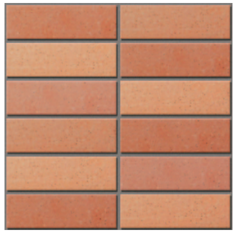
# EAC

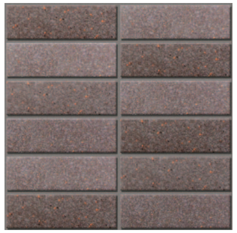
# EAC EARTH COLOR BORDER

## ■145×45

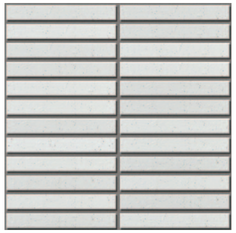

355/EAC-1

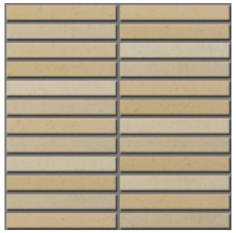

355/EAC-2

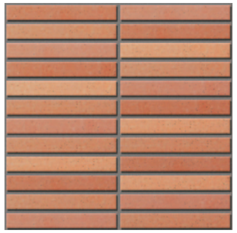

355/EAC-3

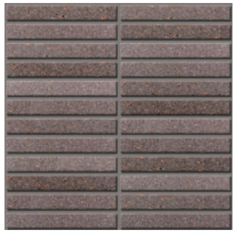

355/EAC-4

## ■145×20


1525/EAC-1


1525/EAC-2


1525/EAC-3

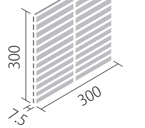
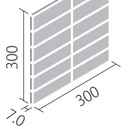
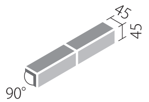

1525/EAC-4

Natural color and surface are suitable for private houses and villas.
There are two lines of products for your residence.

You can choose your favorite line to the design of your residence.

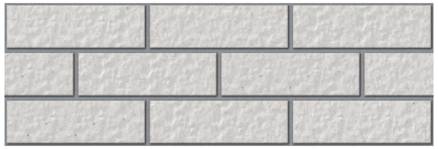
Pasting by sheet　Interior wall　Best　Exterior wall　Best　Fence wall　Best

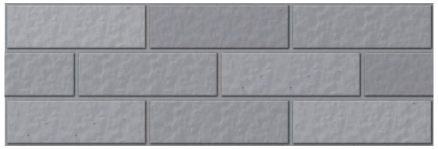
Corner Tile: Place an order before 60 days.

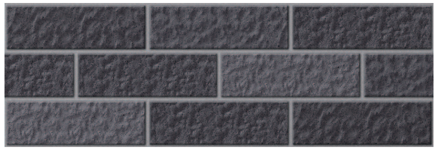
| | Exterior Mosaic 145×20 | Exterior Mosaic 145×45 | 90°angle (paper mounted) |
|---|---|---|---|
| | INAX-1525/EAC | INAX-355/EAC | INAX-355/90-15/EAC |
| |  |  |  |
| size / sht | 300×300mm | 300×300mm | 300×50mm |
| size / pc | 145×20mm | 145×45mm | (45+45)×145mm |
| thickness | 7.5mm | 7.0mm | 7.0mm |
| pieces / sheet | 24pcs | 12pcs | 2pcs |
| quantity / sqm | 11.2shts | 11.2shts | 3.4shts/m |

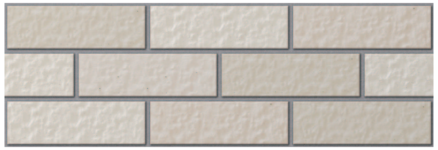
# VIZ

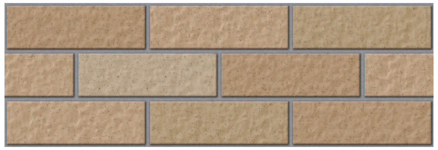
# VIZ COLOR

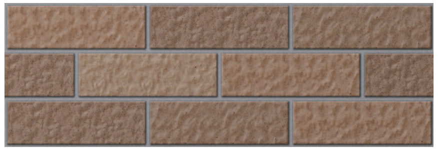

355/VIZ-1N

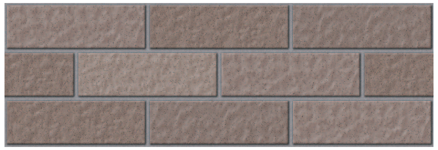

355/VIZ-2N

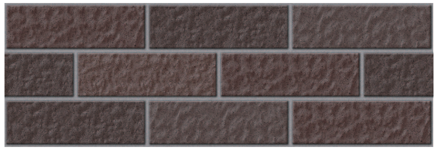

355/VIZ-3N

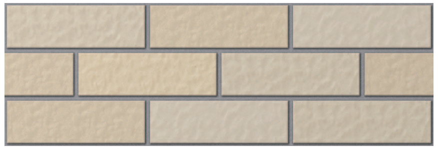

355/VIZ-4N

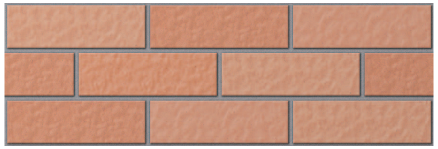

355/VIZ-5N

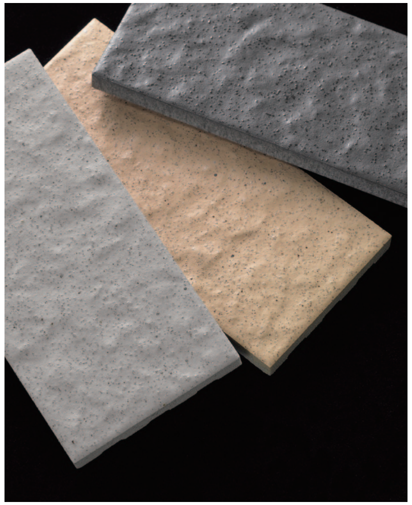

355/VIZ-6N

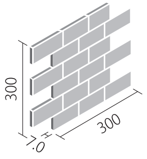

355/VIZ-7N


355/VIZ-8N


355/VIZ-9N

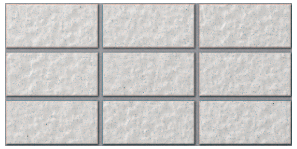

355/VIZ-10N

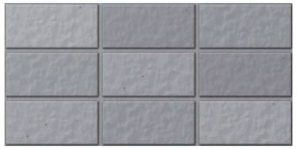


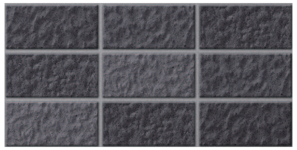
| | Exterior Mosaic 145×45 | INAX-355/VIZ |
|---|---|---|
| size / sht | 300×300mm |  |
| size / pc | 145×45mm | |
| thickness | 7.0mm | |
| pieces/sheet | 12pcs | |
| quantity/sqm | 11.2shts | |

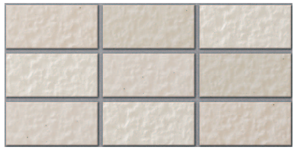
Surface is appropriate for Museum, University, Classical Architecture …

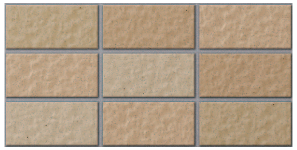
Pasting by sheet | Interior wall | Best | Exterior wall | Best | Fence wall | Best

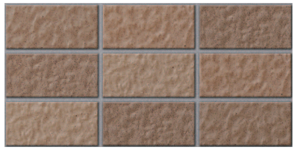

255/VIZ-1

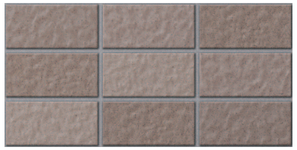

255/VIZ-2

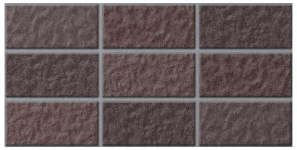

255/VIZ-3

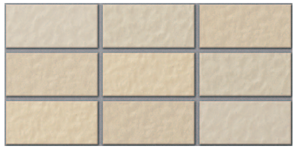

255/VIZ-4

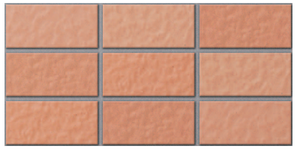

255/VIZ-5

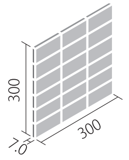
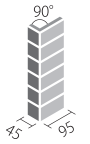
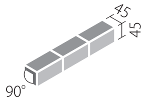

255/VIZ-6


255/VIZ-7


255/VIZ-8


255/VIZ-9


255/VIZ-10

| | Exterior Mosaic 95×45 | 90°angle (paper mounted) | 90°angle (paper mounted) |
|---|---|---|---|
| | INAX-255/VIZ<br> | INAX-255/90-14/VIZ<br> | INAX-255/90-15/VIZ<br> |
| size / sht | 300×300mm | 300×100mm | 300×50mm |
| size / pc | 95×45mm | (95+45)×45mm | (45+45)×95mm |
| thickness | 7.0 mm | 7.0 mm | 7.0 mm |
| pieces/sheet | 18pcs | 6pcs | 3pcs |
| quantity/sqm | 11.2shts | 3.4shts/m | 3.4shts/m |

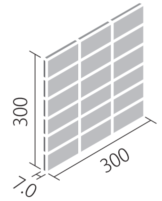
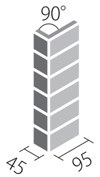
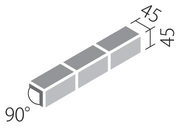
Natural 3color mixed design is suitable for villas.

Corner Tile: Place an order before 60 days.

# PPC

# PPC

## PASTEL PLAIN COLOR

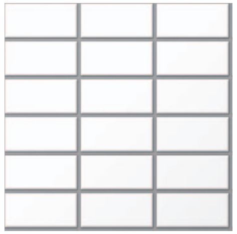
| | Exterior Mosaic 95×45 | 90°angle (paper mounted) | 90°angle (paper mounted) |
|---|---|---|---|
| | INAX-255/SLC | INAX-255/90-14/SLC | INAX-255/90-15/SLC |
| |  |  |  |
| size / sht | 300×300mm | 300×100mm | 300×50mm |
| size / pc | 95×45mm | (95+45)×45mm | (45+45)×95mm |
| thickness | 7.0mm | 7.0mm | 7.0mm |
| pieces / sheet | 18pcs | 6pcs | 3pcs |
| quantity / sqm | 11.2shts | 3.4shts/m | 3.4shts/m |

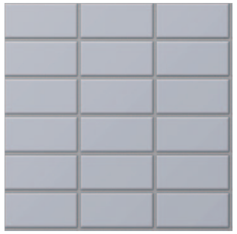
Pasting by sheet · Interior wall · Best · Exterior wall · Best · Fence wall · Best

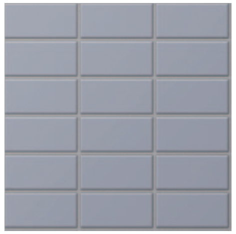
Corner Tile: Place an order before 60 days.

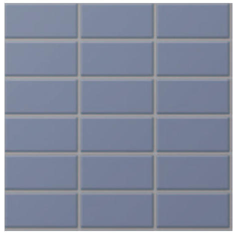
Light bright design brings fresh feeling and it's suitable for all architectual space.

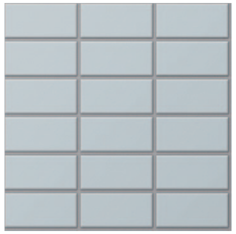
Pastel Color Plain (MICRO GUARD) is a new technique of INAX. Dirty resist and highly self-cleaning.
Providing product for project in the shortest leadtime.

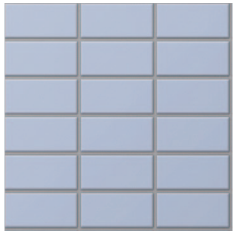

PPC-11

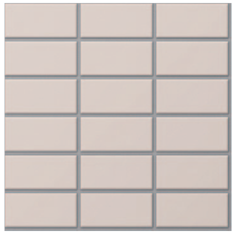

PPC-21

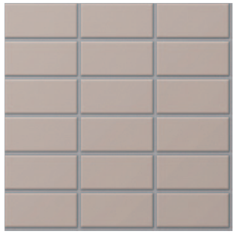

PPC-23

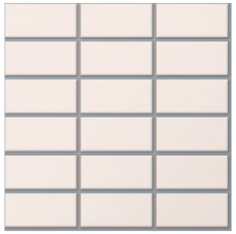

PPC-33

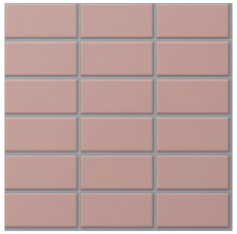

PPC-204

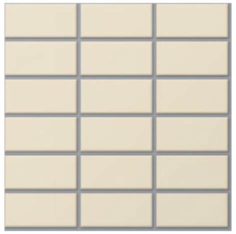

PPC-63

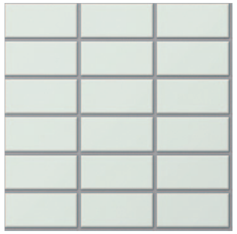

PPC-103


PPC-123


PPC-207


PPC-133

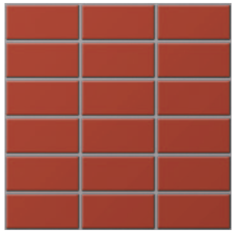

PPC-209

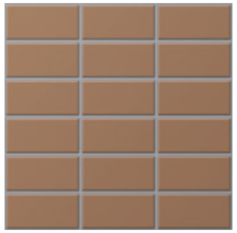

PPC-93

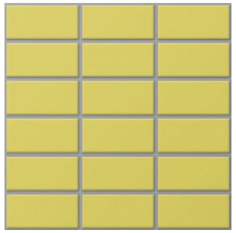
# DPL

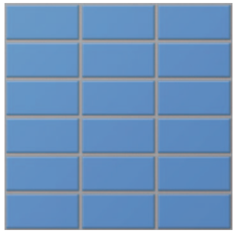
# DPL

## PPC POINT COLOR


DPL-101V

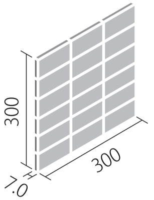

DPL-102V


DPL-103V


DPL-104V

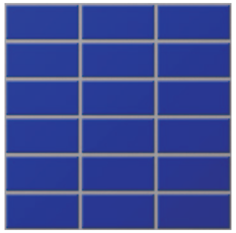
Exterior Mosaic
95×45

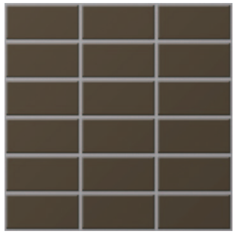
INAX-255/DPL

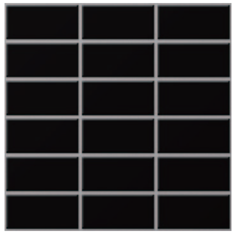


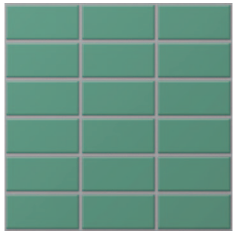
| | |
|---|---|
| size / sht | 300×300mm |
| size / pc | 95×45mm |
| thickness | 7.0mm |
| pieces / sheet | 18pcs |
| quantity / sqm | 11.2shts |

Pasting by sheet
Interior wall ✓ Best
Exterior wall ✓ Best
Fence wall ✓ Best

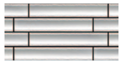
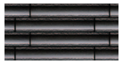
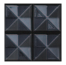
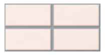

DPL-105V


DPL-106V


DPL-107V


DPL-108V

# List of products

| | **RB**<br>R-BORDER | **BB**<br>BAMBOO BORDER | **SB**<br>STONE BORDER | **SLC**<br>SHINJU LUSTER COLOR | **DELTA** | **BULLION BORDER** | **WAVES** | **EAC**<br>EARTH COLOR BORDER | **VIZ**<br>VIZ COLOR | **PPC**<br>PASTEL PLAIN COLOR | **DPL**<br>PPC POINT COLOR |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SERIES COLOR |  HAL-40B/RB-1<br> HAL-40B/RB-3<br> HAL-40B/RB-2 | INAX-20B/BB-1<br> INAX-20B/BB-2<br> INAX-20B/BB-3 | INAX-30B/SB-1<br> INAX-30B/SB-2<br> INAX-30B/SB-3 | SLC-1<br> SLC-2<br> SLC-3<br> SLC-4<br> SLC-5<br> SLC-6<br> SLC-8<br> SLC-9 | IM-50P1/DL1<br> IM-50P1/DL2 | IM-1525P1/BL1<br> IM-1525P1/BL2 | IM-50P1/W V1<br> IM-50P1/W V2 | 1525/EAC-1<br> 355/EAC-1<br> 1525/EAC-2<br> 355/EAC-2<br> 1525/EAC-3<br> 355/EAC-3<br> 1525/EAC-4<br> 355/EAC-4 | 255/VIZ-1<br> 355/VIZ-1N<br> 255/VIZ-2<br> 355/VIZ-2N<br> 255/VIZ-3<br> 355/VIZ-3N<br> 255/VIZ-4<br> 355/VIZ-4N<br> 255/VIZ-9<br> 355/VIZ-9N<br> 255/VIZ-5<br> 355/VIZ-5N<br> 255/VIZ-6<br> 355/VIZ-6N<br> 255/VIZ-7<br> 355/VIZ-7N<br> 255/VIZ-10<br> 355/VIZ-10N<br> 255/VIZ-8<br> 355/VIZ-8N | PPC-11<br> PPC-21<br> PPC-23<br> PPC-204<br> PPC-93<br> PPC-63<br> PPC-33<br> PPC-209<br> PPC-103<br> PPC-123<br> PPC-207<br> PPC-133 | DPL-107V<br> DPL-105V<br> DPL-104V<br> DPL-108V<br> DPL-103V<br> DPL-101V<br> DPL-102V<br> DPL-106V |
| Construction Method | Construction methods using elastic adhesive | | | Mortar | Construction methods using elastic adhesive | | | Mortar | | | |
| The width of joint | 3mm | | | 5mm | 3mm | | | 5mm | | | |

# LIXIL Corporation : Corporate Profile

LIXIL
Link to Good Living

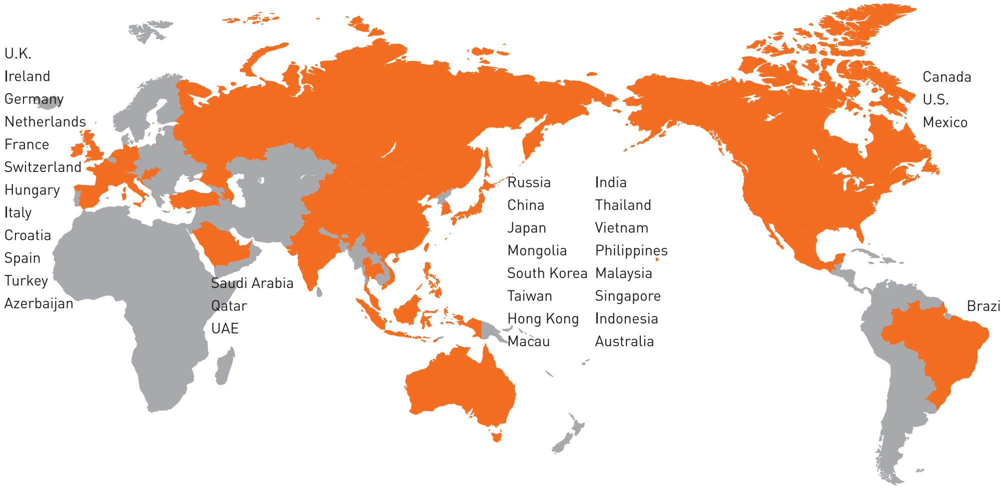
**The Group's superior products and services contribute to improving people's comfort and lifestyies.**

As a Comprehensive living and housing solutions company, LIXIL Corporation provides products and services that cater to a wide variety of home, living, and urban environment development needs. Solutions offered range from windows, entrance doors, exterior products, external walls, structural /decorative tiles, and interior furnishings to systems for kitchens, bathrooms and restrooms, as well as range of facilities for office and commercial buildings and public facilities, including train stations and others.

## Comfortable Living around the World

LIXIL's corporate philosophy is to contribute to improving people's comfort and lifestyles. LIXIL is taking on the challenge to expand business in the globe.

## LIXIL Global Business Location


U.K.
Ireland
Germany
Netherlands
France
Switzerland
Hungary
Italy
Croatia
Spain
Turkey
Azerbaijan
Saudi Arabia
Qatar
UAE
Russia
China
Japan
Mongolia
South Korea
Taiwan
Hong Kong
Macau
India
Thailand
Vietnam
Philippines
Malaysia
Singapore
Indonesia
Australia
Canada
U.S.
Mexico
Brazil

## CORPORATE DATA (As to March 31,2014)

| | | | |
|---|---|---|---|
| **Corporate Name** | LIXIL Corporation | **Employees** | 14,187 employees, as of March 31,2014 |
| | | **Capital** | 34.6 billion yen |
| **Established** | October 1,2001 | **Net Sales** | 954.8 billion yen |
| **Major Businesses** | Manufacture and sales of building materials and housing equipment as well as related services | | |
| **Registered Office** | 2-1-1 Ojima, Kouto-ku Tokyo 136-8535, Japan | | |
| **Head Office** | 36F, Kasumigaseki Building, 3-2-5 Kasumigaseki, Chiyoda-ku, 100-6036 Tokyo | | |

LIXIL

Link to Good Living